

Fig. 1  
Jungbun 5

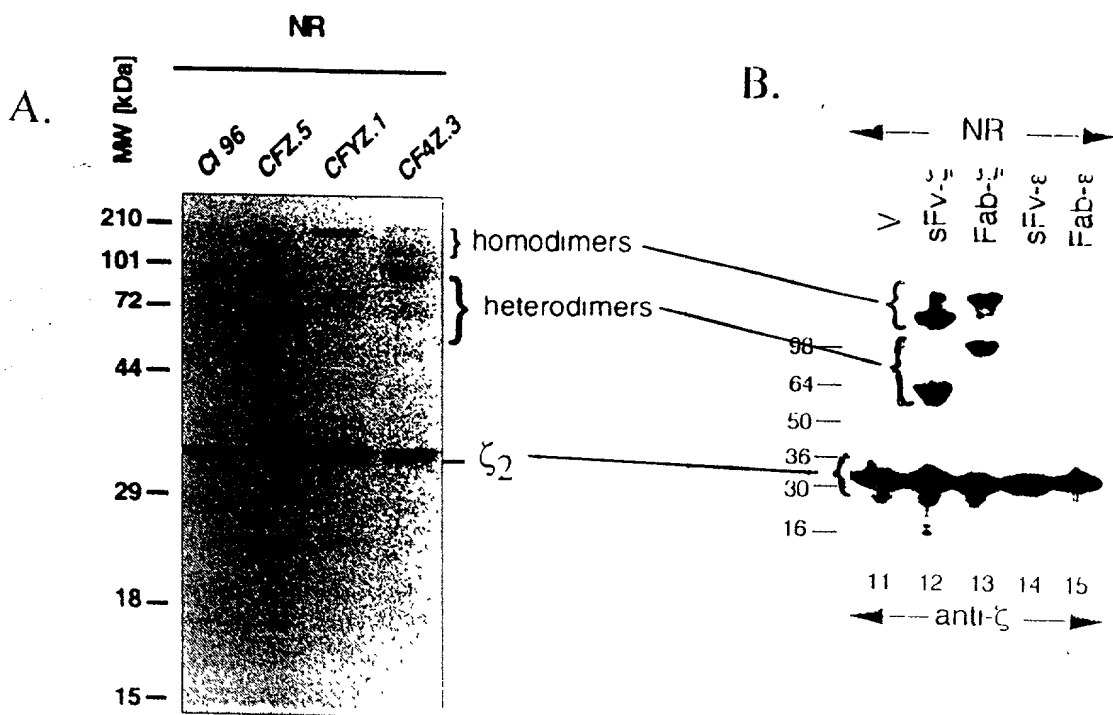


Fig. 2  
Jungheun s



NAME: BMB3.6-H-Ch 504 BPS DNA UPDATED 6/25/93  
DESCRIPTION: Heavy chain leader and variable region of BMB3.6-h

\* \* \* S E Q U E N C E \* \* \*

1 TCACCATGAA CTTCGGGTTC AGCTTGATTT TCCTTGTCCT TGTTTTTAAAA GGTGTCCAGT  
AGTGGTACTT GAAGCCCAAG TCGAACTAAA AGGAACAGGA ACAAATTTT CCACAGGTCA

61 GTGAAGTGGT GGTGGTGGAG TCTGGGGGAG GCTTCGTGAA GCCTGGAGGG TCCCTGAAAC  
CACTTCACCA CCACCACCTC AGACCCCTC CGAAGCACTT CGGACCTCCC AGGGACTTTG

121 TCTCCTGTGC AGCCGCTGGA TTCACTTTCA GTAGATATGC CATGTCTTGG GTTCGCCAGA  
AGAGGACACG TCGGCGACCT AAGTGAAAGT CATCTATACG GTACAGAACC CAAGCGGTCT

181 CTCCGGAGAA GAGGCTGGAG TGGGTCGCAA CCATAAGTAG TGGTGGTAGT CACACCTACT  
GAGGCCTCTT CTCCGACCTC ACCCAGCGTT GGTATTCATC ACCACCATCA GTGTGGATGA

241 ATCCAGACAG TGTGAAGGGG CGATTCACCA TCTCCAGAGA CAATGCCAAG AACACCCTGT  
TAGGTCTGTC AACTTCCCC GCTAAGTGGT AGAGGTCTCT GTTACGGTTC TTGTGGGACA

301 ACCTGCAAAT GAGCAGTCTG AGGTCTGAGG ACACGGCCAT ATATTACTGT GCAAGACCGG  
TGGACGTTTA CTCGTCAGAC TCCAGACTCC TGTGCCGGTA TATAATGACA CGTTCTGGCC

361 GTTACGACAG GGGGGCCTGG TTTTTCGATG TCTGGGGCGC AGGGACCACG GTCACCGTCT  
CAATGCTGTC CCCCCGGACC AAAAAGCTAC AGACCCCGCG TCCCTGGTGC CAGTGGCAGA

421 CCTCAGGTAA GTGTGTCAGG GTTTCACAAG AGGGACTAAA GACATGTCAG CTAATGTGTG  
GGAGTCCATT CACACAGTCC CAAAGTGTTT TCCCTGATTT CTGTACAGTC GATTACACAC

481 ACTAATGGTA ATGTCACTAA GCTT  
TGATTACCAT TACAGTGATT CGAA

Fig. 4A  
Junkies

NAME: BMB3.6-L-Ch 483 BPS DNA UPDATED 6/25/93  
DESCRIPTION: LIGHT CHAIN LEADER AND VARIABLE REGION OF bmb3.6 C

\* \* \* S E Q U E N C E \* \* \*

1 AGGGAAAGCT CGAAGATGGT TTTCACACCT CAGATACTTG GACTTATGCT TTTTGGATT  
TCCCTTTCGA GCTTCTACCA AAAGTGTGGA GTCTATGAAC CTGAATACGA AAAAACCTAA

61 TCAGCCTCCA GAGGTGATAT TGTGCTAACT CAGTCTCCAG CCACCCTGTC TGTGACTCCA  
AGTCGGAGGT CTCCACTATA ACACGATTGA GTCAGAGGTC GGTGGGACAG ACACTGAGGT

121 GGAGATAGCG TCAGTCTTTC CTGCAGGGCC AGCCAAATTA TTAGCAACAA CCTACACTGG  
CCTCTATCGC AGTCAGAAAG GACGTCCCGG TCGGTTTAAT AATCGTTGTT GGATGTGACC

181 TATCAACAAA AATCACATGA GTCTCCAAGG CTTCTCATCA AGTATGCTTC CCAGTCCATC  
ATAGTTGTTT TTAGTGTACT CAGAGGTTCC GAAGAGTAGT TCATACGAAG GGTGAGGTAG

241 TCTGGGATCC CCTCCAGGTT CAGTGGCAGT GGATCAGGGA CAGATTTTAC TCTCAGTATC  
AGACCCTAGG GGAGGTCCAA GTCACCGTCA CCTAGTCCCT GTCTAAAGTG AGAGTCATAG

301 AACAGTGTGG AGACTGAAGA TTTTGGAAATG TATTTCTGTC AACAGAGTAA CAGCTGGCCT  
TTGTCACACC TCTGACTTCT AAAACCTTAC ATAAAGACAG TTGTCTCATT GTCGACCGGA

361 CTCACGTTTCG GCTCGGGGAC AAAGCTGGAG ATCAAACGGC GTAAGTGTGT CAGGGTTTCA  
GAGTGCAAGC CGAGCCCCTG TTTCGACCTC TAGTTTGCCG CATTACACA GTCCCAAAGT

421 CAAGAGGGAC TAAAGACATG TCAGCTAATG TGTGACTAAT GGTAATGTCA CTTGTCAGGA  
GTTCTCCCTG ATTTCTGTAC AGTCGATTAC AACTGATTA CCATTACAGT GAACAGTCCT

481 TCC  
AGG

Fig. 4B  
Singhans

NAME: sFv MB3.6  
 DESCRIPTION: Light chain leader plus sFv of MB3.6

\*\*\* S E Q U E N C E \*\*\*

←vector XbaI Start→leader  
 1 GATATCAGAT CTCAGCTGTC TAGA CATATG GTTTTCACAC CTCAGATANN NNNNNNNNNN  
 ORF→D I R S Q L S R H M V F T P Q I ? ? ? ?  
 I S D L S C L D I W F S H L R ? ? ? ?  
 Y Q I S A V - T Y G F H T S D ? ? ? ?  
 leader←V<sub>L</sub>  
 61 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNGGGAC AAAGCTGGAG  
 ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? G T K L E  
 ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? G Q S W  
 ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? D K A G  
 V<sub>L</sub>←Linker Linker→V<sub>H</sub>  
 121 ATCAAAGGTG GCTCAGGATC GGGTGGAGCC GGCTCTGGTG GCTCAGGATC GGAAGTGGTG  
 I K G G S G S G G A G S G G S G S E V V  
 R S K V A Q D R V E P A L V A Q D R K W  
 D Q R W L R I G W S R L W W L R I G S G  
 181 GTGGTGGAGN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNACC  
 V V E ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? T  
 W W W ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?  
 G G G ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?  
 V<sub>H</sub>←TCR E/h3  
 241 ACGGTCACCG TCTCCAGT  
 T V T V S S  
 P R S P S P  
 H G H R L Q

Fig. 4C  
 J. J. J. J.

## \*\*\* INPUT INFORMATION \*\*\*

FILE NAME : 3D8HCDNA.SEQ

SEQUENCE : 682BP; 153 A; 184 C; 173 G; 172 T.

## \*\*\* SEQUENCE LIST \*\*\*

(DOUBLE)

	10	20	30	40	50	60
5'	TGAACACGGA	CCCCTCACCA	TGAACTTCGG	GCTCAGCTTG	ATTTTCCTTG	TCCTTGTTTT
3'	ACTTGTGCCT	GGGGAGTGGT	ACTTGAAGCC	CGAGTCGAAC	TAAAAGGAAC	AGGAACAAAA
	70	80	90	100	110	120
	AAAAGGTGTC	CAGTGTGAAG	TGAAGGTGGT	GGAGTCTGGG	GGAGGCTTAG	TGAAGCCTGG
	TTTTCCACAG	GTCACACTTC	ACTTCCACCA	CCTCAGACCC	CCTCCGAATC	ACTTCGGACC
	130	140	150	160	170	180
	AGCGTCTCTG	AAACTCTCCT	GTGCAGCCTC	TGGATTCACT	TTCAGTAACT	ATGGCATGTC
	TCGCAGAGAC	TTTGAGAGGA	CACGTCGGAG	ACCTAAGTGA	AAGTCATTGA	TACCGTACAG
	190	200	210	220	230	240
	TTGGGTTCGC	CAGACTTCAG	ACAAGAGGCT	GGAGTGGGTC	GCATCCATTA	GTAGTGGTGG
	AACCCAAAGCG	GTCTGAAGTC	TGTTCTCCGA	CCTCACCCAG	CGTAGGTAAT	CATCACCACC
	250	260	270	280	290	300
	TGATAGCACC	TTCTATGCAG	ACAATGTAAA	GGGCCGATTC	ACCATCTCCA	GAGAGAATGC
	ACTATCGTGG	AAGATACGTC	TGTTACATTT	CCCGGCTAAG	TGGTAGAGGT	CTCTCTTACG
	310	320	330	340	350	360
	CAAGAACACC	CTGTACCTGC	AAATGAGTAG	TCTGAAGTCT	GAGGACACGG	CCTTGTATTA
	GTTCTTGTGG	GACATGGACG	TTTACTCATC	AGACTTCAGA	CTCCTGTGCC	GGAACATAAT
	370	380	390	400	410	420
	CTGTGCAAGA	GACGATCTAT	TTAACTGGGG	CCAAGGCACC	ACTCTCACAG	TCTCATCAGC
	GACACGTTCT	CTGCTAGATA	AATTGACCCC	GGTTCGCTGG	TGAGAGTGTC	AGAGTAGTCG
	430	440	450	460	470	480
	CAAAACAACA	GCCCCATCGG	TCTATCCACT	GGCCCCTGTG	TGTGGAGATA	CAATTGGCTC
	GTTTTGTTGT	CGGGGTAGCC	AGATAGGTGA	CCGGGGACAC	ACACCTCTAT	GTTAACCGAG
	490	500	510	520	530	540
	CTCGGTGACT	TTAGGATGCC	TGGTCAAGGG	TTATTTCTTT	GAGCCAGTGA	CCTTGACCTG
	GAGCCACTGA	AATCCTACGG	ACCAGTTCCC	AATAAAGGAA	CTCGGTCACT	GGAAGTGGAC
	550	560	570	580	590	600
	GAACTCTGGA	TCCCTGTCCA	GTGGTGTGCA	CATCTTCCCA	GCTGTCTTGC	AGTCTGACCT
	CTTGAGACCT	AGGGACAGGT	CACCACACGT	GTAGAAGGGT	CGACAGAACG	TCAGACTGGA
	610	620	630	640	650	660
	CTACACCCTC	AGCAGCTCAG	TGACTGTAAC	CTCGAGCACC	TGGCCCAGCC	AGTCCATCAC
	GATGTGGGAG	TCGTGAGTTC	ACTGACATTG	GAGCTCGTGG	ACCGGGTCGG	TCAGGTAGTG
	670	680				
	TTGCAATGTG	GCCCACCCGG	CA 3'			
	AACGTTACAC	CGGGTGGGCC	GT 5'			

Fig. 4D  
Junghans

\*\*\* INPUT INFORMATION \*\*\*

FILE NAME : 3D8LCDNA.SEQ

SEQUENCE : 729BP; 203 A; 177 C; 172 G; 177 T.

\*\*\* SEQUENCE LIST \*\*\* (DOUBLE)

	10	20	30	40	50	60
5'	CCGTTGCCGT	CGTGATGAGT	CCTGCCCAGT	TCCTGTTTCT	GTTAGTGCTC	TGGATTCAGG
3'	GGCAACGGCA	GCACTACTCA	GGACGGGTCA	AGGACAAAGA	CAATCACGAG	ACCTAAGTCC
	70	80	90	100	110	120
	AAACCAACGG	TGATGTTGTA	ATGACCCAGA	CTCCACTCAC	TTTGTGCGTT	ACCATTGGAC
	TTTGGTTGCC	ACTACAACAT	TACTGGGTCT	GAGGTGAGTG	AAACAGCCAA	TGGTAACCTG
	130	140	150	160	170	180
	AACCAGCCTC	TATCTCTTGC	AAGTCAAGTC	AGAGCCTCTT	ATATAGTAAT	GGAAAAACCT
	TTGGTCGGAG	ATAGAGAACG	TTCAGTTCAG	TCTCGGAGAA	TATATCATT	CCTTTTGGGA
	190	200	210	220	230	240
	ATTTGAATTG	GTTATTACAG	AGGCCAGGCC	AGTCTCCAAA	GCGCCTAATC	TATCTGGTGT
	TAAACTTAAC	CAATAATGTC	TCCGGTCCGG	TCAGAGGTTT	CGCGGATTAG	ATAGACCACA
	250	260	270	280	290	300
	CTAAACTGGA	CTCTGGAGTC	CCTGACAGGT	TCAGTGGCAG	TGGATCAGGA	ACAGATTTTA
	GATTTGACCT	GAGACCTCAG	GGACTGTCCA	AGTGACCGTC	ACCTAGTCCT	TGTCTAAAAT
	310	320	330	340	350	360
	CACTGAAAAT	CAGCAGAGTG	GAGGCTGAGG	ATTTGGGAGT	TTATTACTGC	GTGCAAGGTA
	GTGACTTTTA	GTCGTCTCAC	CTCCGACTCC	TAAACCCTCA	AATAATGACG	CACGTTCCAT
	370	380	390	400	410	420
	CACATTTTTCC	TCACACGTTT	GGAGGGGGGA	CCAAGCTGGA	AATAAAAACG	GCTGATGCTG
	GTGTAAAAGG	AGTGTGCAAG	CCTCCCCCCT	GGTTCGACCT	TTATTTTGCC	CGACTACGAC
	430	440	450	460	470	480
	CACCAACTGT	ATCCATCTTC	CCACCATCCA	GTGAGCAGTT	AACATCTGGA	GGTGCCTCAG
	GTGGTTGACA	TAGGTAGAAG	GGTGGTAGGT	CACTCGTCAA	TTGTAGACCT	CCACGGAGTC
	490	500	510	520	530	540
	TCGTGTGCTT	CTTGAACAAC	TTCTACCCCA	AAGACATCAA	TGTCAAGTGG	AAGATTGATG
	AGCACACGAA	GAAGTTGTTG	AAGATGGGGT	TTCTGTAGTT	ACAGTTCACC	TTCTAACTAC
	550	560	570	580	590	600
	GCAGTGAACG	ACAAAATGGC	GTCCTGAACA	GTTGGACTGA	TCAGGACAGC	AAAGACAGCA
	CGTCACTTGC	TGTTTTACCG	CAGGACTTGT	CAACCTGACT	AGTCCTGTCT	TTTCTGTCTG
	610	620	630	640	650	660
	CCTACAGCAT	GAGCAGCACC	CTCACGTTGA	CCAAGGACGA	GTATGAACGA	CATAACAGCT
	GGATGTCGTA	CTCGTCGTGG	GAGTGCAACT	GGTTCCTGCT	CATACTTGCT	GTATTGTCGA
	670	680	690	700	710	720
	ATACCTGTGA	GGCCACTCAC	AAGACATCAA	CTTCACCCAT	TGTCAAGAGC	TTCAACAGGA
	TATGGACACT	CCGGTGAGTG	TTCTGTAGTT	GAAGTGGGTA	ACAGTTCTCG	AAGTTGTCCT

ATGAGTGTT 3'  
TACTCACAA 5'

Fig. 4E  
Junghans

## \*\*\* INPUT INFORMATION \*\*\*

FILE NAME : 4D4HCDNA.SEQ

SEQUENCE : 736BP; 170 A; 210 C; 186 G; 170 T.

## \*\*\* SEQUENCE LIST \*\*\*

(DOUBLE)

10 20 30 40 50 60  
5' ACTGACTCTA ACCATGGGAT GGAGATGGAT CTTTCTTTTC CTCCTGTCAG GAACTGCAGG  
3' TGACTGAGAT TGGTACCCTA CCTCTACCTA GAAAGAAAAG GAGGACAGTC CTTGACGTCC  
70 80 90 100 110 120  
TGTCCATTGC CAGGTTTCAGC TGCAGCAGTC TGGACCTGAG CTGGTGAAGC CTGGGGCTTT  
ACAGGTAACG GTCCAAGTCG ACGTCGTCAG ACCTGGACTC GACCACTTCG GACCCCGAAA  
130 140 150 160 170 180  
AGTGAAGATA TCCTGCAAGG CTTCTGGTTA CACCTTCACA AGCTACGATA TAAACTGGGT  
TCACCTTCTAT AGGACGTTCC GAAGACCAAT GTGGAAGTGT TCGATGCTAT ATTTGACCCA  
190 200 210 220 230 240  
GAAGCAGAGG CCTGGACAGG GACTTGAGTG GATTGGATGG ATTTATCCTG GAGATGGTGG  
CTTCGTCTCC GGACCTGTCC CTGAACTCAC CTAACCTACC TAAATAGGAC CTCTACCACC  
250 260 270 280 290 300  
TACTAATTAC AATGAGAAAT TCAAGGGCAA GGCCACACTG ACTGCAGACA AATCCTCCAG  
ATGATTAATG TTA CTCTTTA AGTTC CCGTT CCGGTGTGAC TGACGTCTGT TTAGGAGGTC  
310 320 330 340 350 360  
CACAGCCTAC ATGCAGCTCA GTAGCCTGAC TTCTGAGAAC TCTGCAGTCT ATTTCTGTGC  
GTGTCCGATG TACGTCGAGT CATCGGACTG AAGACTCTTG AGACGTCAGA TAAAGACACG  
370 380 390 400 410 420  
AAGAGGGGGT AACTTCCCTT CTTATGCTAT GGACTACTGG GGTCAAGGAA CCTCAGTCAC  
TTCTCCCCCA TTGAAGGGAA GAATACGATA CCTGATGACC CCAGTTCCTT GGAGTCAGTG  
430 440 450 460 470 480  
CGTCTCCTCA GCCAAAACGA CACCCCCATC TGTCTATCCA CTGGCCCCCTG GATCTGCTGC  
GCAGAGGAGT CGGTTTGTCT GTGGGGGTAG ACAGATAGGT GACCGGGGAC CTAGACGACG  
490 500 510 520 530 540  
CCAAACTAAC TCCATGGTGA CCCC GGGATG CCTGGTCAAG GGCTATTTCC CTGAGCCAGT  
GGTTTGATTG AGGTACCACT GGGGCCCTAC GGACCAGTTC CCGATAAAGG GACTCGGTCA  
550 560 570 580 590 600  
GACAGTGACC TGGAACTCTG GATCCCTGTC CAGCGGTGTG CACACCTTCC CAGCTGTCCT  
CTGTCACTGG ACCTTGAGAC CTAGGGACAG GTCGCCACAC GTGTGGAAGG GTCGACAGGA  
610 620 630 640 650 660  
GCAGTCTGAC CTCTACACTC TGAGCAGCTC AGTGACTGTC CCCTCCAGCA CCTGGCCCAG  
CGTCAGACTG GAGATGTGAG ACTCGTCGAG TCACTGACAG GGGAGGTCGT GGACCGGGTC  
670 680 690 700 710 720  
CGAGACCGTC ACCTGCAACG TTGCCCCACC GGCCAGCAGC ACCAAGGTGG ACAAGAAAAT  
GCTCTGGCAG TGGACGTTGC AACGGGTGGG CCGGTCGTCG TGGTTCCACC TGTTCTTTTA  
730  
TGTGCCCAGG GATTGT 3'  
ACACGGGTCC CTAACA 5'

Fig. 4F  
Junghans

\*\*\* INPUT INFORMATION \*\*\*

FILE NAME : 4D4LCDNA.SEQ

SEQUENCE : 504BP; 120 A; 126 C; 122 G; 136 T.

\*\*\* SEQUENCE LIST \*\*\*

(DOUBLE)

	10	20	30	40	50	60
5'	CTCAAAATGA	AGTTGCCTGT	TAGGCTGTTG	GTGCTGATGT	TCTGGATTCC	TGCTTCCAAC
3'	GAGTTTACT	TCAACGGACA	ATCCGACAAC	CACGACTACA	AGACCTAAGG	ACGAAGGTTG
	70	80	90	100	110	120
	AGTGATGTTT	TGATGACCCA	ATCTCCACTC	TCCCTGCCTG	TCAGTCTTGG	AGATCAAGCC
	TCACTACAAA	ACTACTGGGT	TAGAGGTGAG	AGGGACGGAC	AGTCAGAACC	TCTAGTTCGG
	130	140	150	160	170	180
	TCCATCTCTT	GCAGATCTAG	TCAGAGCATT	GTCCATAGTA	ATGGAGACAC	CTATTTAGAA
	AGGTAGAGAA	CGTCTAGATC	AGTCTCGTAA	CAGGTATCAT	TACCTCTGTG	GATAAATCTT
	190	200	210	220	230	240
	TGGTACCTGC	AGAAACCAGG	CCAGTCTCCA	AAGCTCCTGA	TCTACAAGGT	TTCCGACCGA
	ACCATGGACG	TCTTTGGTCC	GGTCAGAGGT	TTCGAGGACT	AGATGTTCCA	AAGGCTGGCT
	250	260	270	280	290	300
	TTTTCTGGGG	TCCCAGACAG	GTTCACTGGC	AGTGGATCAG	GGACAGATTT	CACACTCAAG
	AAAAGACCCC	AGGGTCTGTC	CAAGTCACCG	TCACCTAGTC	CCTGTCTAAA	GTGTGAGTTC
	310	320	330	340	350	360
	ATCAGCAGAG	TGGAGGCTGA	GGATCTGGGA	GTTTATTTCT	GCTTTCAAGG	TTCACATGTT
	TAGTCGTCTC	ACCTCCGACT	CCTAGACCCT	CAAATAAAGA	CGAAAGTTCC	AAGTGTACAA
	370	380	390	400	410	420
	CCGTACGCGT	TCGGAGGGGG	GACCAAGCTG	GAAATAAAAC	GGGCTGATGC	TGCACCAACT
	GGCATGCGCA	AGCCTCCCCC	CTGGTTCGAC	CTTTATTTTG	CCCGACTACG	ACGTGGTTGA
	430	440	450	460	470	480
	GTATCCATCT	TCCCACCATC	CAGTGAGCAG	TTAACATCTG	GAGGTGCCTC	AGTCGTGTGC
	CATAGGTAGA	AGGGTGGTAG	GTCACCTCGT	AATTGTAGAC	CTCCACGGAG	TCAGCACACG
	490	500				
	TTCTTGAACA	ACTTCTACCC	CAAA	3'		
	AAGAACTTGT	TGAAGATGGG	GTTT	5'		

Fig. 49  
Jurahans

## \*\*\* INPUT INFORMATION \*\*\*

FILE NAME : 3E11HCDN.SEQ

SEQUENCE : 761BP; 167 A; 213 C; 188 G; 193 T.

## \*\*\* SEQUENCE LIST \*\*\*

(DOUBLE)

10 20 30 40 50 60  
5' CCTGGATTCA ATTTCCAGTT CCTCACATTC AGTGATCAGC ACTGAACACG GACCCCTCAC  
3' GGACCTAAGT TAAAGGTCAA GGAGTGTAAG TCACTAGTCG TGACTTGTGC CTGGGGAGTG  
70 80 90 100 110 120  
CATGAACTTC GGGCTCAGCT TGATTTTCCT TGTCCTTGTT TTAAAAGGTG TCCAGTGTGA  
GTACTTGAAG CCCGAGTCGA ACTAAAAGGA ACAGGAACAA AATTTTCCAC AGGTCACACT  
130 140 150 160 170 180  
AGTGAAACTG GTGGAGTCTG GGGGAGACTT AATGAACCCT GGAGCGTCTC TGAAACTCTC  
TCACTTTGAC CACCTCAGAC CCCCTCTGAA TTACTTGGGA CCTCGCAGAG ACTTTGAGAG  
190 200 210 220 230 240  
CTGTGCAGCC TCTGGATTCA GTTTCAGTAA CTATGGCATG TCTTGGGTTC GCCAGACTTC  
GACACGTCGG AGACCTAAGT CAAAGTCATT GATACCGTAC AGAACCCAAG CGGTCTGAAG  
250 260 270 280 290 300  
AGACAAGAGG CTGGAGTGGG TCGCTTCCAT TAGTACGGGT GGTGCTAATA CCTTCTATCC  
TCTGTTCTCC GACCTACCC AGCGAAGGTA ATCATGCCCA CCACGATTAT GGAAGATAGG  
310 320 330 340 350 360  
AGACAATGTA AAGGGCCGAT TCACCATTTC CAGAGAGAAT GCCAAGAACA CCCTATACCT  
TCTGTTACAT TTCCCGGCTA AGTGGTAAAG GTCTCTCTTA CGGTTCTTGT GGGATATGGA  
370 380 390 400 410 420  
GCAAATGAGT AGTCTGAAGT CTGAGGACAC GGCCTTGAT TTTCTGTCAA GAGATAGTCA  
CGTTTACTCA TCAGACTTCA GACTCCTGTG CCGGAACATA AAGACACGTT CTCTATCAGT  
430 440 450 460 470 480  
CTCCGTAGGT TGTGTTGTTT CTACCTGGGG CCAAGGGACT CTGGTCACTG TCTCTGCAGC  
GAGGCATCCA ACAACCAAAC GATGGACCCC GGTTCCCTGA GACCAGTGAC AGAGACGTCG  
490 500 510 520 530 540  
CAAAACAACA CCCCCATCAG TCTATCCACT GGCCCCCTGGG TGTGGAGATA CTACTGGTTC  
GTTTTGTTGT GGGGGTAGTC AGATAGGTGA CCGGGGACCC ACACCTCTAT GATGACCAAG  
550 560 570 580 590 600  
CTCCGTGACT CTGGGATGCC TGGTCAAGGG CTACTTCCCT GAGTCAGTGA CTGTGACTTG  
GAGGCACTGA GACCCTACGG ACCAGTTCCC GATGAAGGGA CTCAGTCACT GACACTGAAC  
610 620 630 640 650 660  
GAACTCCGGA TCCCTGCCCA GCAGTGTGCA CACCTTCCCA GCTCTCCTGC AGTCTGGACT  
CTTGAGGCCT AGGGACGGGT CGTCACACGT GTGGAAGGGT CGAGAGGACG TCAGACCTGA  
670 680 690 700 710 720  
CTACACTATG AGCAGCTCAG TGA CTGTGCTCC CTCCAGCACC TGGCCAAGCC AGACCGTTAC  
GATGTGATAC TCGTCGAGTC ACTGACAGGG GAGGTCGTGG ACCGTTTCGG TCTGGCAATG  
730 740 750 760  
CTGCAGTGTT GCTCACCAG CCAGCAGCAC CACGGTGGAC A 3'  
GACGTCACAA CGAGTGGGTC GGTCGTCGTG GTGCCACCTG T 5'

Fig. 4H  
Junghans

## \*\*\* INPUT INFORMATION \*\*\*

FILE NAME : 3E11LCDN.SEQ

SEQUENCE : 698BP; 199 A; 179 C; 167 G; 153 T.

## \*\*\* SEQUENCE LIST \*\*\*

(DOUBLE)

10 20 30 40 50 60  
5' CCAGCATGGG CATCAAGATG GAATCACAGA CTCTGGTCTT CATATCCATA CTGCTCTGGT  
3' GGTCGTACCC GTAGTTCTAC CTTAGTGTCT GAGACCAGAA GTATAGGTAT GACGAGACCA  
70 80 90 100 110 120  
TATATGGAGC TGATGGGAAC ATTGTAATGA CCCAATCTCC CAAATCCATG TCCATGTCAG  
ATATACCTCG ACTACCCTTG TAACATTACT GGGTTAGAGG GTTTAGGTAC AGGTACAGTC  
130 140 150 160 170 180  
TAGGAGAGAG GGTCACCTTG ACCTGCAAGG CCAGTGAGAA TGTGGTTACT TATGTTTCCT  
ATCCTCTCTC CCAGTGGAAC TGGACGTTCC GGTCACTCTT ACACCAATGA ATACAAAGGA  
190 200 210 220 230 240  
GGTATCAACA GAAACCAGAG CAGTCTCCTA AACTGCTGAT ATACGGGGCA TCCAACCGGT  
CCATAGTTGT CTTTGGTCTC GTCAGAGGAT TTGACGACTA TATGCCCCGT AGGTTGGCCA  
250 260 270 280 290 300  
ACACTGGGGT CCCCAGTCGC TTCACAGGCA GTGGATCTGC AACAGATTTT ACTCTGACCA  
TGTGACCCCA GGGGCTAGCG AAGTGTCCGT CACCTAGACG TTGTCTAAAG TGAGACTGGT  
310 320 330 340 350 360  
TCAGCAGTGT GCAGGCTGAA GACCTTGCAG ATTATCACTG TGGACAGGGT TACAGCTATC  
AGTCGTCACA CGTCCGACTT CTGGAACGTC TAATAGTGAC ACCTGTCCCA ATGTCGATAG  
370 380 390 400 410 420  
CGTACACGTT CGGAGGGGGG ACCAAGCTGG AAATAAAACG GGCTGATGCT GCACCAACTG  
GCATGTGCAA GCCTCCCCC TGGTTCGACC TTTATTTTGC CCGACTACGA CGTGGTTGAC  
430 440 450 460 470 480  
TATCCATCTT CCCACCATCC AGTGAGCAGT TAACATCTGG AGGTGCCTCA GTCGTGTGCT  
ATAGGTAGAA GGGTGGTAGG TCACTCGTCA ATTGTAGACC TCCACGGAGT CAGCACACGA  
490 500 510 520 530 540  
TCTTGAACAA CTTCTACCCC AAAGACATCA ATGTCAAGTG GAAGATTGAT GGCAGTGAAC  
AGAACTTGTT GAAGATGGGG TTTCTGTAGT TACAGTTCAC CTTCTAACTA CCGTCACTTG  
550 560 570 580 590 600  
GACAAAATGG CGTCCTGAAC AGTTGGACTG ATCAGGACAG CAAAGACAGC ACCTACAGCA  
CTGTTTTACC GCAGGACTTG TCAACCTGAC TAGTCCTGTC GTTTCTGTCTG TGGATGTCGT  
610 620 630 640 650 660  
TGAGCAGCAC CCTCACGTTG ACCAAGGACG AGTATGAACG ACATAACAGC TATACCTGTG  
ACTCGTCGTG GGAGTGCAAC TGGTTCCTGC TCATACTTGC TGTATTGTCTG ATATGGACAC  
670 680 690  
AGGCCACTCA CAAGACATCA ACTTCACCCA TCGTCAAG 3'  
TCCGGTGAGT GTTCTGTAGT TGAAGTGGGT AGCAGTTC 5'

Fig. 4I  
Junghans

Anti-GD3 IgTCR-modified T cells

## Anti-Melanoma IgTCR Tumor Targeting

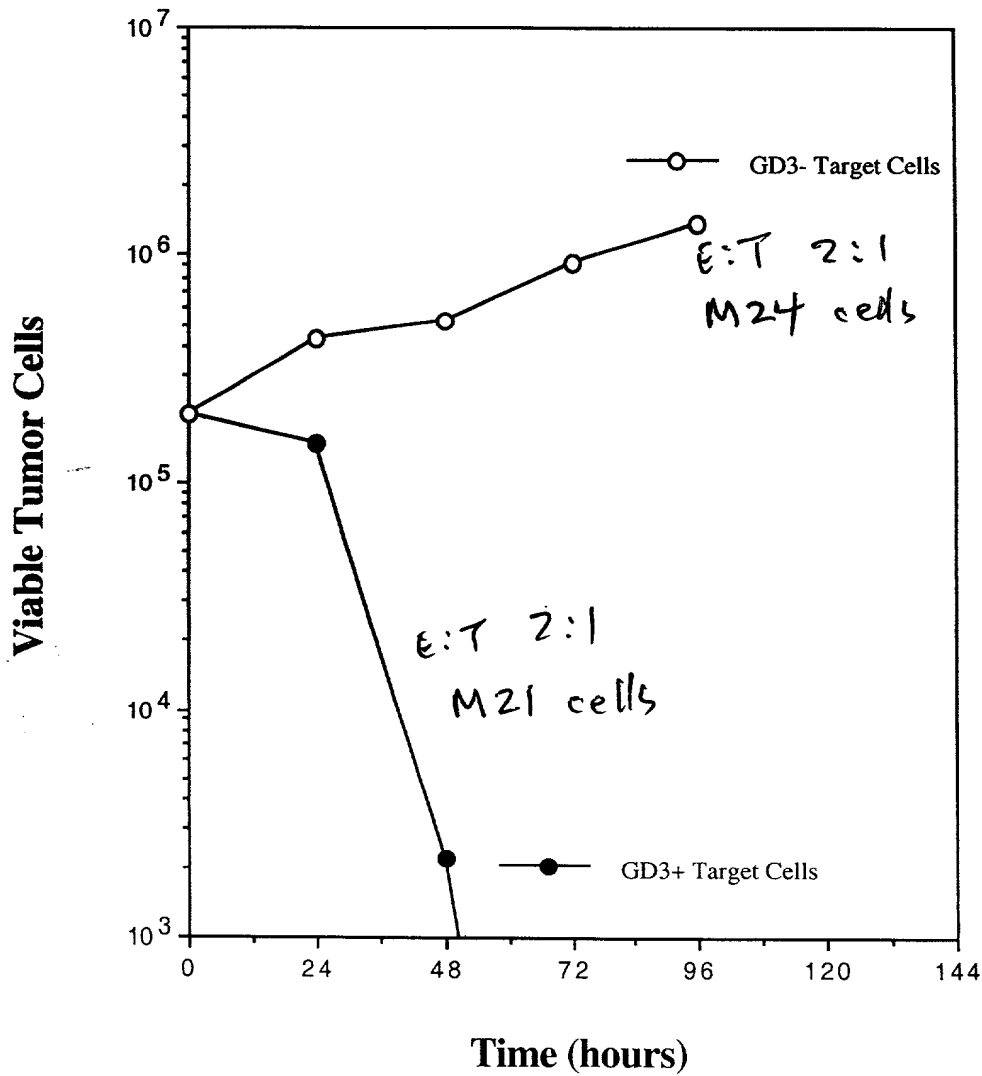


Fig. 5  
Jung et al.

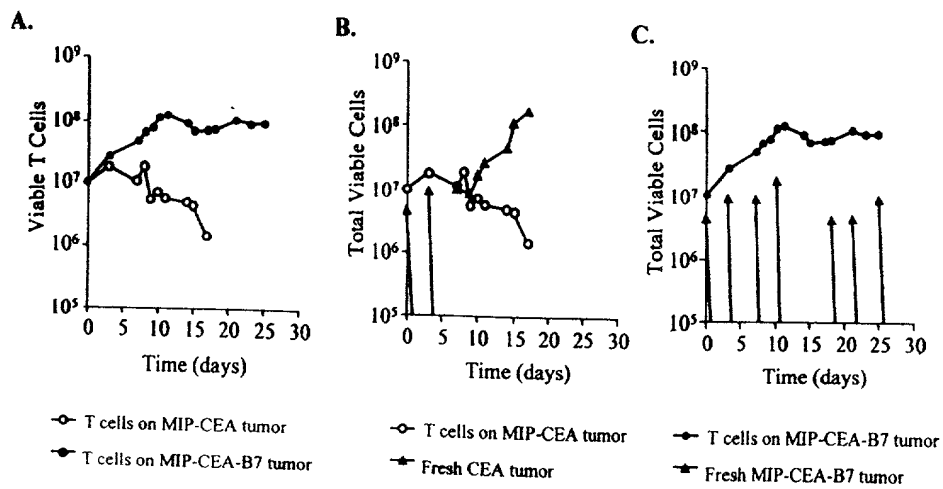


Fig. 6  
Jungmans

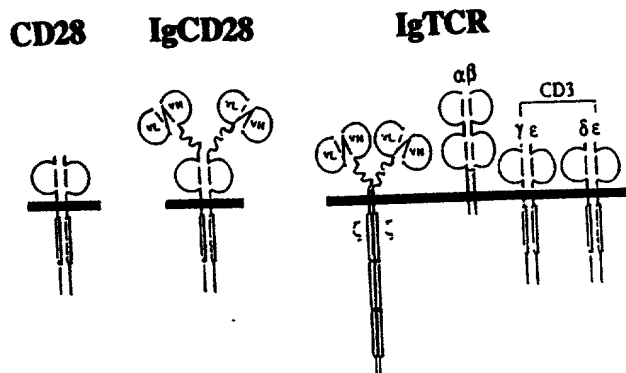


Fig. 7  
Singhans